

Work Order ID 152200

Friday, October 21, 2016 3:02:09 PM

152200

Page 1

Item ID: D117-840-011

Accept

N900040100Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: BK117/EC145 Bearpaws with Wearplates

Start Date: 10/11/2016 Start Qty: 2.00

2

Cust Item ID:

Required Date: 10/21/2016 Req'd Qty: 2.00

2

Customer:

Reference:

Approvals: Process Plan: **DAS**
21
9-89 Date: **OCT 26 2016**

Tooling:

Date:

Run Start ***NR1***QC: **DAS**
21
9-89

Date:

SPC (Y/N):

Date:

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr

Revision Nbr

IIN-D117-840

C

DAS
6
9-89**DEC 12 2016****DAS**
21
9-89**16-12-12**
(2)

100

Document Control

0.00

100

DOCUMENT CONTROL

DC

Memo

0.00

Doc.Control -USB or Paperwork

Photocopy bluefile & type labels per PPP D117-840-011 CHG 003

X2
DAS
27
9-89
DEC 16 2016

160

Pick Kit

0.00

160

Packaging

Memo

0.00

Packaging

2
DAS
6
9-89
DEC 17 2016
DAS
28
9-89

170

QC4- 100% Inspect kits for completeness

0.00

170

QC

Memo

0.01

Quality Control

X2
DAS
27
9-89
DEC 16 2016

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : ☐					

Work Order ID 152200

Friday, October 21, 2016 3:02:09 PM

152200

Page 2

Item ID: D117-840-011

Accept

N900040100

Setup Start

NS1

Revision ID:

Stop

NS2

Item Name: BK117/EC145 Bearpaws with Wearplates

Start Date: 10/11/2016 Start Qty: 2.00

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Cust Item ID:

Required Date: 10/21/2016 Req'd Qty: 2.00

2

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start

NR1

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop

NR2

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
180	Packaging	0.00							
180									
Packaging	Memo	0.00							
Packaging	Identify and pack for shipping as per PPP D117-840-011 Location: _____ PPP Rev: _____								
190	QC21- Final Inspection - Work Order Release	0.00							
190									
QC	Memo	0.03							
Quality Control									

DAS
27
9-89

DEC 15 2016

DAS
21
9-89

DEC 19 2016

DEC 19 2016

DAS
21
9-89

DEC 19 2016

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :				MRB (QSI042) Approval 	
Description Work Order Deviation				Disposition					
								Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	

Root Cause				FAULT CATEGORY							
Environment	☐	No Re-verification	☐	Pressure/Forced	☐	Temperature/Cure	☐	Power Loss/Surge	☐	Positioned Wrong	☐
Design	☐	Operator	☐	Bending	☐	Set-up	☐	Folio/Program	☐	Outside Dimensions	☐
Doc/Data	☐	Offset/Setup	☐	Centre Not Concentric	☐	BOM/Route	☐	Grain	☐	Over/Under tolerance	☐
Equip/Tooling	☐	Supplier	☐	Cracks	☐	Broken/Damage/Defect	☐	Weld	☐	Part Incorrect	☐
Handling/Pre	☐	Training	☐	Crimp/Kink/Ripple/Wave	☐	Inspection Incomplete/Unqualified	☐	Wrong Stock Pulled	☐	Part Lost/Missing	☐
Material	☐	Use for Testing	☐	Cuffs	☐	Contamination	☐	Out of Sequence	☐	Part Moved	☐
Internal Transport	☐	Poor Information	☐	Crushing	☐	Countersink	☐	Off-set	☐	Drawing	☐
Tribal Knowledge	☐	Rushing	☐	Heat Treat	☐	Cut Too Short	☐	Mislabeled	☐	Finish	☐
LOA	☐	Product Improvement	☐	Wave/Twist in Tube	☐	Instructions Incomplete/Unclear	☐	Fit/Function	☐	Misread	☐
Substation	☐	Process Improvement	☐	Marks/Chatter	☐	Drill Holes	☐	Misaligned/off center	☐	Turning Sequence	☐
Past Expiry Date	☐	Manufacturing Process	☐	OTHER :							
Misidentified	☐	Past Due	☐								

Picklist Print

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Page 1

Work Order ID: 152200

152200

Parent Item: D117-840-011

D117-840-011

Parent Item Name: BK117/EC145 Bearpaws with Wearplates

Start Date: 10/11/2016

Required Date: 10/21/2016

Start Qty: 2.00

Required Qty: 2.00

Comments: IPP REV:A NEW ISSUE 13-04-01 JLM VERIED BY:DD IPP
REV:B 13.05.28 PER IIN D117-840 REV.A DD VERF:JLM IPP REV:C
15.03.30 PER REV B JLM VERIFIED BY:DD IPP REV:D 16.02.23
PER IIN REVC DD VERF:JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D2274 *D2274* Radius Block		Manufactured	No				Each	281.0000	8 **	16			
				<u>Location</u>				<u>Loc Qty</u>		<u>Loc Code</u>			
				FG				12					
				86855				12		157463			
				ST006				269					
				150353				114					
				150676				155					
D3456-1 *D3456-1* Washer		Manufactured	No				Each	64.0000	8 **	16			
				<u>Location</u>				<u>Loc Qty</u>		<u>Loc Code</u>			
				FG				7					
				25701				7		157938x2			
				ST037				57					
				149551				7					
				150652				50					
D4012-3 *D4012-3* Cushion		Manufactured	No				Each	15.0000	4 **	8			
				<u>Location</u>				<u>Loc Qty</u>		<u>Loc Code</u>			
				ST545				15					
				136912				6					
				142031				9					

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					

Root Cause				FAULT CATEGORY			
Environment ☐		No Re-verification ☐		Pressure/Forced ☐		Temperature/Cure ☐	
Design ☐		Operator ☐		Bending ☐		Set-up ☐	
Doc/Data ☐		Offset/Setup ☐		Centre Not Concentric ☐		BOM/Route ☐	
Equip/Tooling ☐		Supplier ☐		Cracks ☐		Broken/Damage/Defect ☐	
Handling/Pre ☐		Training ☐		Crimp/Kink/Ripple/Wave ☐		Inspection Incomplete/Unqualified ☐	
Material ☐		Use for Testing ☐		Cuffs ☐		Contamination ☐	
Internal Transport ☐		Poor Information ☐		Crushing ☐		Countersink ☐	
Tribal Knowledge ☐		Rushing ☐		Heat Treat ☐		Cut Too Short ☐	
LOA ☐		Product Improvement ☐		Wave/Twist in Tube ☐		Instructions Incomplete/Unclear ☐	
Substation ☐		Process Improvement ☐		Marks/Chatter ☐		Drill Holes ☐	
Past Expiry Date ☐		Manufacturing Process ☐		OTHER :			
Misidentified ☐		Past Due ☐					

Picklist Print

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Work Order ID: 152200

152200

Parent Item: D117-840-011

D117-840-011

Parent Item Name: BK117/EC145 Bearpaws with Wearplates

Start Date: 10/11/2016

Required Date: 10/21/2016

Start Qty: 2.00

Required Qty: 2.00

D5377-1 Manufactured No

Each 1.0000 2 4

D5377-1

Bearpaw

** 152272 DAS 6 9-89 DEC 12 2016 DAS 28 9-89

Location

Loc Qty

Loc Code

ST438A

1

142032

1

D5378-041 Manufactured No

Each 2.0000 2 4

D5378-041

Bearpaw Wearplate Assembly

** 152164 DAS 6 9-89 DEC 12 2016 DAS 28 9-89

Location

Loc Qty

Loc Code

ST604

2

142033

2

D5379-1 Manufactured No

Each 48.0000 4 8

D5379-1

Bearpaw Clamp

** DAS 6 9-89 DAS 28 9-89

Location

Loc Qty

Loc Code

st543

48

142034

13

142619

35

AN4C11A Purchased No

Each 73.0000 12 24

AN4C11A

Bolt

** DAS 6 9-89 DAS 28 9-89

Location

Loc Qty

Loc Code

ST344

73

m134370

73

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
		OTHER :			

Picklist Print

Friday, October 21, 2016 3:02:09 PM

Page 3

Work Order ID: 152200

152200

Parent Item: D117-840-011

D117-840-011

Parent Item Name: BK117/EC145 Bearpaws with Wearplates

Start Date: 10/11/2016

Required Date: 10/21/2016

Start Qty: 2.00

Required Qty: 2.00

AN4C17A Purchased No

Each 35.0000 8 16

AN4C17A

Bolt

**

DAS
6
9-89

DAS
28
9-89

Location

Loc Qty

Loc Code

ST343

35

m134376

35

Each

812.0000

20 16 40

**

DAS
6
9-89

DAS
28
9-89

MS21043-4

Purchased No

MS21043-4

Nut

DAS
27
9-89

Location

Loc Qty

Loc Code

FG

40

104603

40

GA

17

m132803

17

ST302

755

m135407

1

m135530

254

m135600

500

Each

2,310.000

40 16

**

DAS
6
9-89

DAS
28
9-89

NAS1149D0463J

Purchased No

NAS1149D0463J

Washer

DAS
27
9-89

Location

Loc Qty

Loc Code

GA

135

M134508

32

M135056

103

ST260a

1000

M135767

1000

ST263

1175

M135530

175

M135671

1000

135948

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition			
				Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : _____					

4.0 WEIGHT AND BALANCE

Installation	Weight	LATERAL		LONGITUDINAL	
		Arm	Moment	Arm	Moment
D117-840-011	27.7 lb	0.0 in	0.0 lb-in	204.1 in	5653 in-lb
Bearpaw Installation	12.6 kg	0.0 mm	0.0 mm-kG	5200 mm	65,520 mm-kG

5.0 PARTS LIST

QTY -011	Part Number	Description
X	D117-840-011	BEARPAW INSTALLATION
8	D2274	RADIUS BLOCK
8	D3456-1	WASHER
4	D4012-3	CLAMP CUSHION (REPLACES D4012-1)
2	D5377-1	BEARPAW (REPLACES D4796-1)
2	D5378-041	BEARPAW WEARPLATE ASSY (REPLACES D4798-041)
4	D5379-1	BEARPAW CLAMP (REPLACES D4799-1)
12	AN4C11A	BOLT
8	AN4C17A	BOLT
20	MS21043-4	NUT
12	NAS1149D0463J	WASHER

4.0 WEIGHT AND BALANCE

Installation	Weight	LATERAL		LONGITUDINAL	
		Arm	Moment	Arm	Moment
D117-840-011	27.7 lb	0.0 in	0.0 lb-in	204.1 in	5653 in-lb
Bearpaw Installation	12.6 kg	0.0 mm	0.0 mm-kg	5200 mm	65,520 mm-kg

5.0 PARTS LIST

QTY -011	Part Number	Description
X	D117-840-011	BEARPAW INSTALLATION
8	D2274	RADIUS BLOCK
8	D3456-1	WASHER
4	D4012-3	CLAMP CUSHION (REPLACES D4012-1)
2	D5377-1	BEARPAW (REPLACES D4796-1)
2	D5378-041	BEARPAW WEARPLATE ASSY (REPLACES D4798-041)
4	D5379-1	BEARPAW CLAMP (REPLACES D4799-1)
12	AN4C11A	BOLT
8	AN4C17A	BOLT
20	MS21043-4	NUT
12	NAS1149D0463J	WASHER